Form ESA-B4. Public Report for ESA-108-2
Final

Company	Domtar	**ESA Dates**	June 26-28 & October 19, 2007
Plant	Port Edwards	**ESA Type**	Fans
Product	Pulp and Paper	**ESA Specialist**	Ron Wroblewski

Brief Narrative Summary Report for the Energy Savings Assessment:

Introduction:

Objective of ESA:
Identify Fan system opportunities

Focus of Assessment:
Deliver training in use of the FSAT tool and identify energy efficiency opportunities.

Approach for ESA:
The first day was a training day, with the remaining time spent examining the various systems, and trying to find the drawings and flow information for the various systems. The plant was keenly interested in switching the turbine drives to electric motors for maintenance and reliability reasons (turbines need to be torn apart and rebuilt every few years).

General Observations of Potential Opportunities:
- Indicate total plant natural gas cost for base year, 2006 - No Gas used
- Heavy Oil – 1,013,400 MMbtu @
- Indicate total plant electrical cost for base year, Indicate impact fuel cost in $/MMBtu, impact electrical cost in cents/kWh if necessary for ESA
- Note what you would expect would be Near Term, Medium Term, Long Term opportunities. See definitions below:

Opportunities identified

Pocket vent Fans 1, 2, & 3 – Near Term Opportunities
The fans are operating against a VIV that is mostly closed. Slow down the fan by changing the belts and pulleys and then open the damper to achieve the desired airflow. Further testing is needed to measure the flow pressure and power for these fans so that the proper fan speed can be accomplished.

Magnesium Oxide recovery boiler ID and FD fans – Medium Term opportunity
The recovery boiler fans are driven by steam turbines. The use of the turbines sometimes causes an oversupply of 50 lb steam, which sometimes triggers venting of steam. As a result, the it costs a lot more to operate the fans using the turbines than it would to use an electric motor. Shutting down the turbine could mean that a boiler could be shut down, which would have very large energy savings on the boiler fuel. Potentially there are hundreds of thousands of dollars of savings, but also hundreds of thousands in investment to install the new electrical infrastructure.

Management Support and Comments:
Plant is closing.

DOE Contact at Plant/Company: (who DOE would contact for follow-up regarding progress in implementing ESA results…)
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